

Date: Wed, 17 Feb 93 12:38:12 PST
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V93 #223
To: Info-Hams

Info-Hams Digest Wed, 17 Feb 93 Volume 93 : Issue 223

Today's Topics:

800 & crossband rpt mods for the DJ-560? Please help.
 Allison Peacock KD4NNH/AG
 A QRP list?
 Bill Clinton and military surplus
 dilemma (to drill or not to drill) (2 msgs)
 FAA Radar power? (2 msgs)
FCC proposal on receivers/scanners including cellular
 Grace DSP-12 vs. AEA DSP-1232 ? Opinions?
 Info-Hams Digest V92 #942
 Lin pot type AB?
 MODS WANTED FOR HTX-100
 Re: Amplifier Tuning
 Straight Keys

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 17 Feb 93 16:12:23 GMT
From: ogicse!emory!wupost!darwin.sura.net!convex!horak@network.UCSD.EDU
Subject: 800 & crossband rpt mods for the DJ-560? Please help.
To: info-hams@ucsd.edu

In <Feb.16.10.20.39.1993.19065@clam.rutgers.edu> steuer@clam.rutgers.edu (robert Steuer) writes:

>I am posting this for a friend who has a DJ-560 from Alinco. He says
>there are mods which enable the radio to RX 800MHz and do Cross-Band

>repeat, but I can't find the mods for him anywhere. BTW, he already
>has the mod for out of band Transmit. If you have the mods for 800 or
>the crossband repeat, please e-mail them to me. Thank You!

>-----
>| Robert Steuer Internet: steuer@clam.rutgers.edu |
>| Rutgers University Amateur Radio: KF2EK@N3FOA.#EPA.PA.USA.NA |
>| VHF Repeater System Cherry Hill, NJ - KF2EK Repeater 145.370MHz |

I own a DJ560T and I know of NO 800MHz or crossband mods. The DJ580 has
those capability but I am pretty sure the DJ560 does NOT.

Sorry,
David

Date: Wed, 17 Feb 1993 13:12:43 GMT
From: pacbell.com!sgiblab!sdd.hp.com!col.hp.com!news.dtc.hp.com!hpscit.sc.hp.com!
hpuerca.atl.hp.com!edh@network.UCSD.EDU
Subject: Allison Peacock KD4NNH/AG
To: info-hams@ucsd.edu

In <86889@ut-emx.uucp> oo7@astro.as.utexas.edu (Derek Wills) writes:

>kd1hz@anomaly.sbs.com (Michael P. Deignan) rather grudgingly asks:

>>>While I certainly am always happy to see youngsters get involved in Amateur
>>>Radio, why would you be proud of someone who simply demonstrates that they can
>>>memorize the question pool?

>First of all, who says she memorized it all? Perhaps she understands
>at least some of the stuff too (like all of us, right?). Hands up all
>those who didn't memorize something for their test. And the morse
>test is all memorization, too, isn't it?

>And what about that Judit Polgar, chess GM at age 6 months or whatever?
>She only memorized the chess moves anyway, right? And those musical
>prodigies - I bet they practise scales and stuff. I dunno, kids these
>days, sheesh!

>Grumpily,

>Derek Wills (AA5BT, G3NMX)
>Department of Astronomy, University of Texas,
>Austin TX 78712. (512-471-1392)
>oo7@astro.as.utexas.edu
>oo7@emx.utexas.edu

Thanks Derek! Couldn't have said it better myself.
dit dit

Cheers Ed Humphries N5RCK
Hewlett-Packard NARC Atlanta GA

Date: 17 Feb 93 19:22:43 GMT
From: news-mail-gateway@ucsd.edu
Subject: A QRP list?
To: info-hams@ucsd.edu

Is there a mailing list out there devoted to QRP issues?

72
Kevin Purcell N7WIM / G8UDP
a-kevinp@microsoft.com
"We conjure the spirits of the computer with our spells"

Date: Wed, 17 Feb 1993 15:01:50 GMT
From: agate!spool.mu.edu!darwin.sura.net!mlb.semi.harris.com!news@ames.arpa
Subject: Bill Clinton and military surplus
To: info-hams@ucsd.edu

Greetings all..

Just spoke with Bill Slep of Slep electronics (military surplus), he claims Clinton has put a halt to military surplus auctions. Has anyone else heard this?

Ray

Date: 17 Feb 93 12:47:11 GMT
From: news.larc.nasa.gov!arbd0.larc.nasa.gov!zawodny@uunet.uu.net
Subject: dilemma (to drill or not to drill)
To: info-hams@ucsd.edu

>can anyone tell me what they have done to fill said hole once they sold the
>vehicle, and/or what the effects were on resale value?

I had an 88 Voyager with a 3/4" hole in the roof for the antenna mount. I filled the hole with one of the standard rubber body plugs that the antenna manufacturers and radio stores sell. Since the hole was on the roof, between raised ribs, and most people are short enough not to see things that high,

noone saw or mentioned it when it was for sale. I think the moral is that if you are going to keep a car (especially a truck) for 4 or 5 years, the buyer is not going to care about a rubber bung in the roof. They are worried about more important things. So get the drill out, but be careful not to let the bit go sliding across the roof leaving a big scratch :-)

--

Joseph M. Zawodny (K04LW)
Internet: zawodny@arbd0.larc.nasa.gov
Packet: ko4lw@wb0tax.va.usa

NASA Langley Research Center
MS-475, Hampton VA, 23681-0001

Date: Wed, 17 Feb 1993 12:34:12 GMT
From: dog.ee.lbl.gov!hellgate.utah.edu!cs.utexas.edu!sdd.hp.com!usc!howland.reston.ans.net!gatech!concert!unccsun.uncc.edu!jmcoving@network.UCSD.EDU
Subject: dilemma (to drill or not to drill)
To: info-hams@ucsd.edu

In article <MOSBROOK.93Feb16201248@beach.csulb.edu> mosbrook@csulb.edu (Brent Mosbrook) writes:

>I just bought a new truck, and am itching to install my radio in it.. the
>problem is that I am debating about whether or not to drill a hole and put an
>antenna through the roof, or if I should just use a mag-mount.
>can anyone tell me what they have done to fill said hole once they sold the
>vehicle, and/or what the effects were on resale value?
>any new, innovative ideas regarding patching the hole if need be?

Drilling holes is by far the best option. If you do it right, it won't scratch your paint, the coax won't get in the way every time you open your door and it should never need maintenance. I put a permanent mount in my car two years ago and have had NO trouble since. Mag mounts and other temporary mounts are more of a pain because the coax has to come in through a door or trunk lid, and it tends to get pinched often enough that it goes bad after a while.

To make the mount easy to 'cover' when you sell the vehicle, do this: First, make sure you use an NMO mount if the antennas are for 10 meters, VHF or UHF. NMO is a standard and will allow you the greatest flexibility in putting antennas on it in the future. Don't waste your time on the antennas mounts that produce a smaller hole; a hole is a hole.

Use low-loss coax like that used at 800 MHz. I can't remember the number but I'm sure someone on here will fill you in. Larsen sells an NMO mount with this coax already on it, I believe. In any event use the best small coax you can find.

Put whatever antenna you want to use on the mount and enjoy it for years.

When you get ready to sell the vehicle, take off your antenna and put on a cheap cellular phone antenna with an NMO mount - I think I've seen them for around \$10. Replace the coax connector you have had and put a TNC connector on it. You can now sell the car with an ADDED feature - it's cellular ready. You might want to investigate replacing the power connector also; I don't remember what cell phones use for power connections nowadays.

Unless you are only going to keep your truck for a year, go ahead and drill holes. If you do it neatly it won't matter at all when you sell the vehicle; with the proliferation of cellular phones you might be able to turn it into a feature!

for

--

John Covington WN4BBJ	Internet: jmcoving@mosaic.uncc.edu
P.O. Box 217122	MCI Mail: JCOVINGTON 342-6957
Charlotte, NC 28221-7122	Packet Radio Mail: WN4BBJ @ N7IJI.#CLT1.NC.USA.NA
(704) 537-7653	"Kenneth, what's the frequency?" "I dunno, ask Dan"

Date: 17 Feb 93 07:47:58 GMT
From: ogicse!uwm.edu!cs.utexas.edu!asuvax!chnews!yucca!jbromley@network.UCSD.EDU
Subject: FAA Radar power?
To: info-hams@ucsd.edu

In article <1993Feb15.093207.3533@samba.oit.unc.edu>
Kirk.Smith@launchpad.unc.edu (Kirk Smith) writes:

.....

>

>Tonight a friend and I visited a local site, but it was dark and
>we got kinda turned around and ended up on the wrong peak (two
>adjacent peaks) and wound up at an FAA Radar Station (Black Mountain,
>California, near Paso Robles in San Luis Obispo County).....

>Does anyone out there know how much power these things run, and at
>what frequency?

>Are these things usually manned?.....

This is an air-route surveillance radar, used to determine aircraft position for en-route air traffic control centers.

These radars operate at approximately 1350 MHz with a peak power of 7.5 Megawatts. If memory serves me, the pulse repetition frequency is somewhere around 400 Hz and the pulse width is about a microsecond.

That would give a duty cycle of .0004 and an average power of 3 kW.

The large radome houses a rotating reflector-type antenna. The reflector is somewhat squarish, about 30 ft by 30 ft (?). It rotates about 3 rpm.

Associated with the radar is a transponder system that transmits on 1030 MHz and receives on 1090 MHz. Its antenna is a rectangular array of dipoles mounted above the primary radar antenna and rotating with it.

Most of these sites are manned on a part-time basis.

This info is from personal visits to a couple of sites. They used to welcome visitors, but that was quite a while ago. Also, some of these sites are operated jointly with the USAF and those do have a security problem.

Date: 17 Feb 93 14:36:57 GMT
From: ogicse!emory!darwin.sura.net!seas.gwu.edu!biby@network.UCSD.EDU
Subject: FAA Radar power?
To: info-hams@ucsd.edu

In article <1lsqjeINNk3k@chnews.intel.com> jbromley@yucca.intel.com (James Bromley~) writes:

>In article <1993Feb15.093207.3533@samba.oit.unc.edu>

> Kirk.Smith@launchpad.unc.edu (Kirk Smith) writes:

>.....

>>

>>Tonight a friend and I visited a local site, but it was dark and
>>we got kinda turned around and ended up on the wrong peak (two
>>adjacent peaks) and wound up at an FAA Radar Station (Black Mountain,
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>7.5 Megawatts. If memory serves me, the pulse repetition frequency
>is somewhere around 400 Hz and the pulse width is about a microsecond.

>That would give a duty cycle of .0004 and an average power of 3 kW.

Yah, 7.5 Megawatts. But don't forget about gain!
We were working against a zoning board regarding RF
expsoure and had to check a couple of these things
out completely. My mouth just hung open when I found
out it was 6-some-odd Megawatts with about 25 dB gain!

I think I would freek out if I was ever close enough
to one to see it with my own eyes...

>

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>reflector is somewhat squarish, about 30 ft by 30 ft (?). It
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>

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>

>

>

--

Rich Biby | 205 N. Evergreen Street, Arlington, VA 22203 (703) 528-8489
KD4DSX | Communications Data Services, Inc.
we are the | 6105-E Arlington Blvd, Falls Church, VA 22044
people our | (703) 534-0034 FAX:(703) 534-7884 (800) 441-0034

Date: 17 Feb 93 13:05:46 GMT

From: ogicse!emory!wupost!usc!sol.ctr.columbia.edu!johnl@network.UCSD.EDU

Subject: FCC proposal on receivers/scanners including cellular

To: info-hams@ucsd.edu

In article <1993Feb12.170846.3241@porthos.cc.bellcore.com>

whs70@dancer.cc.bellcore.com (sohl,william h) writes:

>

>I thought I posted this item to this newsgroup, but having seen not
>one follow-up, I think I may have missed doing so. I suggest all
>hams examine the FCC proposed rules carefully for possible impact
>on ham equipment...especially 900MHz transverters which could
>possibly be used as is or with minor modification to receive cellular
>frequencies in the 800MHz range.

>
>
>

This really scares me because it will probably have a direct impact on ham radio. As pointed out above, much of the new 900 MHz equipment can probably be modified easily to receive 800 MHz. The IC 2AT, and possibly other transceivers, can receive the entire 800 MHz range. These products will have to be redesigned. If they are not big sellers, the manufacturers will probably just drop them.

This is a real threat. Please don't ignore it. Take a 5 minute break from debating whether Morse code is a good or bad thing and write to the FCC. We need to stop this or put in specific exemptions for Amateur Radio equipment.

Whining about the idiots in Congress won't do any good but a half million letters to the FCC pointing out the problems with Docket 93-1 can't be ignored.

So, if you want to express your concern about this issue, please write a letter to the FCC. It will only take a few minutes. Here is a rough draft of what I plan to send. Feel free to use it with little or no modification.

73,
John Langner WB2OSZ
john1@avs.com

Comments on Docket No. 93-1

< Your address here >
Feb. 16, 1993

Office of the Secretary
Federal Communications Commission
1919 M Street, NW
Washington, DC 20554

Dear Commissioners:

After examining the text of Docket No. 93-1, I am convinced this proposed rule would NOT contribute to the stated objective of ensuring "the privacy of cellular telephone conversations."

Recent magazine articles on this topic indicate that there are already millions of scanning receivers in use that can receive frequencies in the 800 MHz range. The proposed law would not take effect for another year, providing ample opportunity for scanner manufacturers to sell many millions more.

Even if a scanner isn't capable of receiving signals in this frequency range, a simple converter can be used between the antenna and receiver to shift the frequency of the radio signals.

Trying to ban converters with 800 MHz in and some other frequency range out would be a futile effort. These are very cheap and simple circuits that any electronics hobbyist could build. Plans have been published in electronics magazines.

Besides having no benefits, this proposed rule creates several problems:

- (1) The technically ignorant public might get the idea their conversations are suddenly more secure. When they learn the truth they will be bitter and more distrustful of the telephone companies and government agencies that deceived them.
- (2) Privacy might even be reduced. Before the publicity on this topic, most people didn't realize it was so easy to listen to cellular phone calls. Many who never considered buying a scanner will run out and buy one during the next year.
- (3) New regulations would place an unnecessary burden on electronics manufacturers who would have to change designs and have them recertified.
- (4) It would set an unfortunate precedent. If we have a ban on receivers capable of receiving a certain

range of frequencies, other businesses will expect the same treatment for "their" frequencies.

(5) The regulations could hit unintended targets. For example the 902 MHz band is now experiencing explosive growth for low power commercial and "ham" applications. Surely much of this equipment could easily be modified to pick up signals in the 800 MHz range even if the manufacturer didn't design it with that intention.

I'm all for guarding the privacy of cellular telephone conversations but this is not the way to do it. There is only one solution. The cellular telephone companies must make encryption options available.

In summary, I urge the Commission to reject the proposed regulations in Docket 93-1 because they would create many problems without making any progress toward the stated goal.

Thank you for your attention to this important matter.

Yours truly,

< Your name here >

--

Date: 17 Feb 93 13:14:42 GMT
From: news.cerf.net!pagesat!netsys!agate!spool.mu.edu!sgiblab!nec-gw!nec-tyo!wnoc-tyo-news!glocom!tyo-noc-news!jh1ynw!marina!kohjin@network.UCSD.EDU
Subject: Grace DSP-12 vs. AEA DSP-1232 ? Opinions?
To: info-hams@ucsd.edu

In article <1993Feb16.203347.37392@watson.ibm.com> uri@watson.ibm.com (Uri Blumenthal) writes:

|So, what is it? There's only ONE user of AEA DSP-[12]232
|(who's more-or-less satisfied with his unit), and NONE
|of Grace DSP-12 users [on the Net]?

I'm one of the users of DSP-12 whichever is great or not :-)

|[Yeah, I guess people are too busy arguing, whether the world
|institutions they have no control over, should abandon CW :-].

Have a lot of "arguing" but decided to use it for experimenting/studying DSP
not for practical use, sigh :-<

--

 ----/---- CompuServe: Kohjin Yamada, JR1EDE [76662,111]
 Q-----T-----H 504-55 Shimo-Yamaguchi, Hayama, Miura, Kanagawa, Japan
-----/|----- Phone:+81-468-75-6750 Fax/Modem/Voice:+81-468-76-1176

Date: 17 Feb 93 19:18:42 GMT
From: news-mail-gateway@ucsd.edu
Subject: Info-Hams Digest V92 #942
To: info-hams@ucsd.edu

Date: Wed, 10 Feb 1993 11:15:45 GMT
From: pacbell.com!sgiblab!spool.mu.edu!howland.reston.ans.net!
paladin.american.edu!news.univie.ac.@"hp4at!mcsun!sunic!ericom!sirius!nowhere!
self@network.UCSD.EDU
Subject: Lin pot type AB?
To: info-hams@ucsd.edu

A while ago, I asked if anyone knew what a 'linear potentiometer, type AB' might be. It's the 'type AB' part that puzzles me. I found it in a parts list for an RF noise bridge in then ARRL Antenna book.

Now, I have reason to believe that earlier postings from this site, have been lost, so I'd be very grateful for an indication as to whether this post reaches out. I'd also be very pleased to know the answer to the question at hand.

Thank you in advance.

Rgds,
Stefan

--

e-mail : self@sa.erisoft.se Packet radio : sm2lci@sk2au.ac.swe.eu
FAX : +46 910 358 17 [Views, if expressed, are my own (worst case)]
Other : Fidonet 2:205/505.11, HamNet 12:202/102, VirNet 9:466/150

Date: 17 Feb 93 02:39:30 GMT
From: sun-barr!olivea!gossip.pyramid.com!pyramid!infmx!seashore!randall@ames.arpa
Subject: MODS WANTED FOR HTX-100
To: info-hams@ucsd.edu

jerrys@holly.can.com (Jerry Sturge) writes:

>I am the proud owner of an HTX-100 10 metre radio shaft radio. I am
>looking for any and all mods for this radio. Can it do fm??

There is a mod published in the Artsci -Radio Tech Mods- Volume
5, but this book as many errors and at least one completely
bogus mod. (HTX-202) I would check with someone who
has successfully done this mod before performing it yourself.

--

=====

Randall Rhea	Informix Software, Inc.
Project Manager, MIS Sales/Marketing Systems	uunet!pyramid!infmx!randall

Date: Tue, 16 Feb 1993 23:33:35 GMT
From: saimiri.primite.wisc.edu!sdd.hp.com!hpscit.sc.hp.com!hplextra!hpl-opus!
hpnmdla!alanb@ames.arpa
Subject: Re: Amplifier Tuning
To: info-hams@ucsd.edu

In rec.radio.amateur.misc, M.Willis@ee.surrey.ac.uk (Mike Willis) writes:

>In article <14570632@hpnmdla.sr.hp.com>, alanb@hpnmdla.sr.hp.com (Alan Bloom)
writes:

>|> In rec.radio.amateur.misc, lwwald@lims01.lerc.nasa.gov (LARRY WALD) writes:

>|>

>|> >I'd like to get some feedback concerning tuning a linear that is

>|> >being driven by a solid state exciter. I finally have my

>|> >SB-200 talking to my ICOM and I noticed that if I tuned the SB-200

>|> >for minimum reflected SWR back to the ICOM that this point did not

>|> >match the point for max. power out for the SB-200. Now I was

>|> >only running about 40-50 watts from the ICOM; this may have something

>|> >to do with it.

>|>

>|> If by "tuning" you mean adjusting the plate loading and tuning controls,

>|> then "of course." While the loading/tuning controls do have some influence

>|> on the input impedance (SWR), this is a secondary effect: Tune up for

>|> maximum power output, not lowest input SWR.

>No No, tune for the maximum output power at the correct levels of grid
>and anode current. Just tuning for maximum power is not how to tune a
>valve amplifier for the cleanest signal. You can just keep on feeding
>in power until the amplifier flat tops or catches fire and the power
>meter will keep on going up. Dont tune the loading control for maximum
>power, tune it for correct loading as described in the manual.

Under-loading the pi network can cause splatter. Over-loading the output
can reduce the efficiency. Usually the best tuning adjustment
is close to the max power out condition. If the exciter is capable of
over-driving the amplifier, then you need to reduce exciter power
(while, for example, watching the amplifier grid current.)

>The output load and tune controls should have only a small effect on
>the input if the amplifier is properly neutralised etc. If there is a
>very large effect then there is something wrong.

That's true for grounded-cathode amplifiers. But for grounded-grid amps,
the input circuit and output circuit are effectively in series through
the tube cathode-plate connection. There typically will be some
interaction. That's why the input network should be tuned up with
the output tuned for full power (or whatever your standard operating
condition is.)

AL N1AL

Date: Wed, 17 Feb 1993 14:15:47 GMT
From: dog.ee.lbl.gov!hellgate.utah.edu!caen!malgudi.oar.net!news.ysu.edu!
yfn.ysu.edu!ag821@network.UCSD.EDU
Subject: Straight Keys
To: info-hams@ucsd.edu

I remember seeing a straight key kit that was really
well made at a ham fest.. think it might have been
something like a Kent.. does anyone have any idea
what it might be.

thanks and 73s
Jeff, AC4HF

--
Jeff M. Gold, AC4HF
Manager, Academic Computing Support
Tennessee Technological University

Date: Wed, 17 Feb 1993 15:19:00 GMT
From: agate!howland.reston.ans.net!wupost!emory!sol.ctr.columbia.edu!The-
Star.honeywell.com!umn.edu!moose.cccs.umn.edu!rwh@ames.arpa
To: info-hams@ucsd.edu

References <1993Feb16.155906.9387@cbnewsc.cb.att.com>,
<1993Feb16.163738.2989@porthos.cc.bellcore.com>,
<1993Feb16.175118.12329@cbnewsc.cb.att.com>%
Reply-To : rwh@moose.cccs.umn.edu
Subject : Re: Converter circuit ban is unenforcable

In article <1993Feb16.175118.12329@cbnewsc.cb.att.com>, k9jma@cbnewsc.cb.att.com
(edwin.m.schaefer) writes:

> Not quite. Type acceptance is required for _sale_ of _any_specified_
> (TX or RX) equipment with some defined exceptions. So suppose I want to
> sell my rig (including a RX that scans and covers cellfreqs) to someone else.

No problem as long as you are not the original manufacturer.

> I can sell my homebrew 10 Meter amplifier only because the rules specifically
> allow this. We (will now) need the same dispensation for receiving equipment.

Not yet :-(The regs allow you to sell a certain number of homebrew amplifiers
covering 10 meters within a certain period. I think it is one per year, or
perhaps one per 6 months. I could see 900 MHz converters or scanners being
subjected to a similar restriction. My concern is that at some point scanners
with cellular coverage will become like 11 meter amps where possession is proof
of a crime.

On the otherhand, my friends who play with guns rather than radios tell me
that it is still easy to buy a silencer at a gun show except that you have
to buy the 'kit' from two different people. I could see similar things
happening at hamfests; in fact, at the last one I went to there was a
gentleman set up at a booth doing cell mods while you waited.

In any event, I plan to free up enough cash to make sure that I have my
R-7100 and PRO 2006 in hand before next fall.

> --
> Ed Schaefer K9JMA

--rick, N0LOX

End of Info-Hams Digest V93 #223
